



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2020-0458; Product Identifier 2020-NM-029-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc., Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-100-1A10 airplanes. This proposed AD was prompted by a report that corrosion was found on the shock strut cylinders during unscheduled maintenance of the nose landing gear (NLG). This proposed AD would require a modification of the NLG shock strut cylinder. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0458; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York

ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0458; Product Identifier 2020-NM-029-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this NPRM.

### **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian AD CF-2019-43, dated November 8, 2019 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Bombardier, Inc., Model BD-100-1A10 airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0458.

This proposed AD was prompted by a report that corrosion was found on the shock strut cylinders during unscheduled maintenance of the NLG. The FAA is proposing this AD to address corrosion of the NLG, which could result in structural failure of the NLG. See the MCAI for additional background information.

#### **Related Service Information under 1 CFR Part 51**

Bombardier has issued Service Bulletin 100-32-33, Revision 02, dated September 30, 2019, and Service Bulletin 350-32-009, Revision 02, dated September 30, 2019. This service information describes procedures for modification of the NLG shock strut cylinder. These documents are distinct since they apply to different airplane serial numbers. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **FAA's Determination**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to a bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD because the agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

## **Proposed Requirements of this NPRM**

This proposed AD would require accomplishing the actions specified in the service information described previously.

## **Costs of Compliance**

The FAA estimates that this proposed AD affects 560 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

### **Estimated costs for required actions**

<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Up to 54 work-hours X \$85 per hour = Up to \$4,590	\$43,999	Up to \$48,589	Up to \$27,209,840

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

The FAA has determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2020-0458; Product Identifier 2020-NM-029-AD.

**(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-100-1A10 airplanes, certificated in any category, serial numbers (S/Ns) 20003 through 20767 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 32, Landing gear.

**(e) Reason**

This AD was prompted by a report that corrosion was found on the shock strut cylinders during unscheduled maintenance of the nose landing gear (NLG). The FAA is issuing this AD to address corrosion of the NLG, which could result in structural failure of the NLG.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Modification for Airplanes with S/N 20003 through 20500 Inclusive**

For Bombardier, Inc., Model BD-100-1A10 airplanes with S/N 20003 through 20500 inclusive: At the applicable compliance time specified in paragraph (g)(1) or (2) of this AD, do the modification in paragraph (g)(1) or (2) of this AD, as applicable.

(1) For airplanes with NLG assemblies with 96 months' or less time since new (TSN) as of the effective date of this AD: At the NLG 96-month scheduled inspection, do a modification of the NLG shock strut cylinder, in accordance with paragraph 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 100-32-33, Revision 02, dated September 30, 2019.

(2) For airplanes with NLG assemblies with more than 96 months TSN as of the effective date of this AD: At the applicable compliance times specified in figure 1 to paragraph (g) of this AD, do a modification of the NLG shock strut cylinder, in accordance with paragraph 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 100-32-33, Revision 02, dated September 30, 2019.

**Figure 1 to paragraph (g) – Compliance time**

<b>NLG Assemblies with TSN as of the effective date of this AD</b>	<b>Compliance time from the effective date of this AD</b>
More than 96 months but less than 108 months	Within 56 months
108 months or more but less than 120 months	Within 50 months
120 months or more but less than 132 months	Within 44 months
132 months or more but less than 144 months	Within 36 months
144 months or more but less than 156 months	Within 27 months
156 months or more but less than 174 months	Within 18 months
174 months or more but less than 192 months	At 192-month overhaul

**(h) Modification for Airplanes with S/N 20501 through 20767 inclusive**

For Bombardier, Inc., Model BD-100-1A10 airplanes with S/N 20501 through 20767 inclusive: At the NLG 96-month scheduled inspection, do a modification of the NLG shock strut cylinder, in accordance with paragraph 2.B. of the Accomplishment



Instructions of Bombardier Service Bulletin 350-32-009, Revision 02, dated September 30, 2019.

**(i) Parts Installation Limitation**

As of the effective date of this AD, no person may install, on any airplane, a NLG shock strut assembly with part number (P/N) 40630-111, P/N 40630-113, or P/N 44630-101, unless it has been modified in accordance with paragraphs 2.B. or 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 100-32-33, Revision 02, dated September 30, 2019; or paragraph 2.B. of the Accomplishment Instructions of Bombardier Service Bulletin 350-32-009, Revision 02, dated September 30, 2019; as applicable.

**(j) Credit for Previous Actions**

(1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using paragraph 2.B. or 2.C., as applicable, of Bombardier Service Bulletin 100-32-33, dated October 31, 2018, or Bombardier Service Bulletin 100-32-33, Revision 01, July 31, 2019.

(2) This paragraph provides credit for actions required by paragraph (h) of this AD, if those actions were performed before the effective date of this AD using paragraph 2.B. of Bombardier Service Bulletin 350-32-009, dated October 31, 2018, or Bombardier Service Bulletin 350-32-009, Revision 01 dated July 31, 2019, as applicable, provided that the NLG shock strut assembly with P/N 44630-101 was removed in lieu of P/N 44610-101, as specified in paragraph 2.B.(1) of the Accomplishment Instructions of

Bombardier Service Bulletin 350-32-009, dated October 31, 2018, or Bombardier Service Bulletin 350-32-009, Revision 01 dated July 31, 2019.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(l) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2019-43, dated November 8, 2019, for related information. This MCAI may be

found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0458.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email [9-avs-nyaco-cos@faa.gov](mailto:9-avs-nyaco-cos@faa.gov).

(3) For service information identified in this AD, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); Internet <http://www.bombardier.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued on May 22, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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